

# ENERGY, CLIMATE RISK IN INVESTMENT STRATEGY AND PROCESS

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# GOOD AFTERNOON, NICE TO MEET YOU!



PRI, responsible for Investment Practices development

**Previous experience:**

University of Cambridge, Institute for Sustainability Leadership

Société Générale CIB, Debt Capital Markets

ABN Amro Rothschild, Equity Capital Markets

ABN AMRO, Debt Capital Markets

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# Content today

**Institution in play - low carbon transition**

**Portfolio carbon – what is it?**

**Asset Owner Investment Strategy steps**

# Content

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# NOT THERE YET = TRANSITION

## #ENERGY-MARKET-INSTITUTION-ON-THE-MOVE



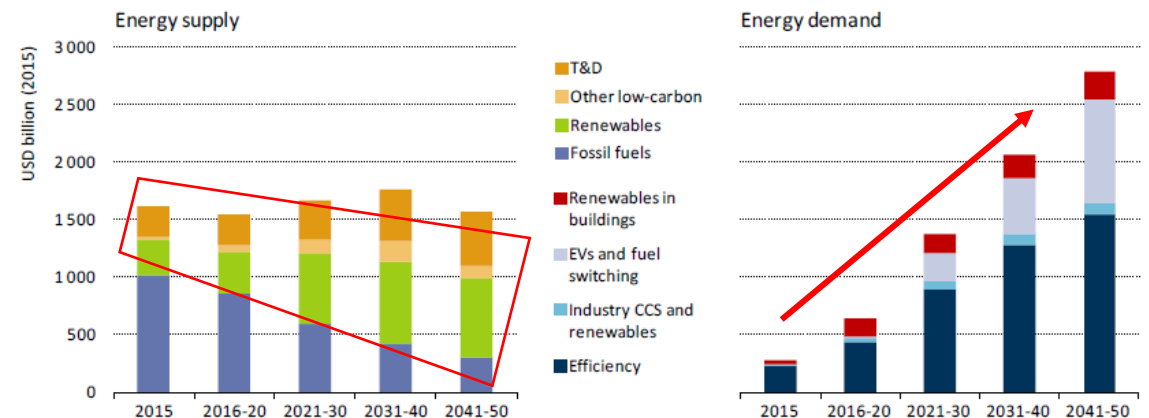
“A low-carbon economy is an economy based on low carbon power sources ...

.. globally implemented low-carbon economies are therefore proposed, as a means to [avoid catastrophic climate change](#), and as a precursor to the more advanced, zero-carbon economy.”

### Energy Sector Investment to Meet Climate Goals

© OECD/IEA 2017

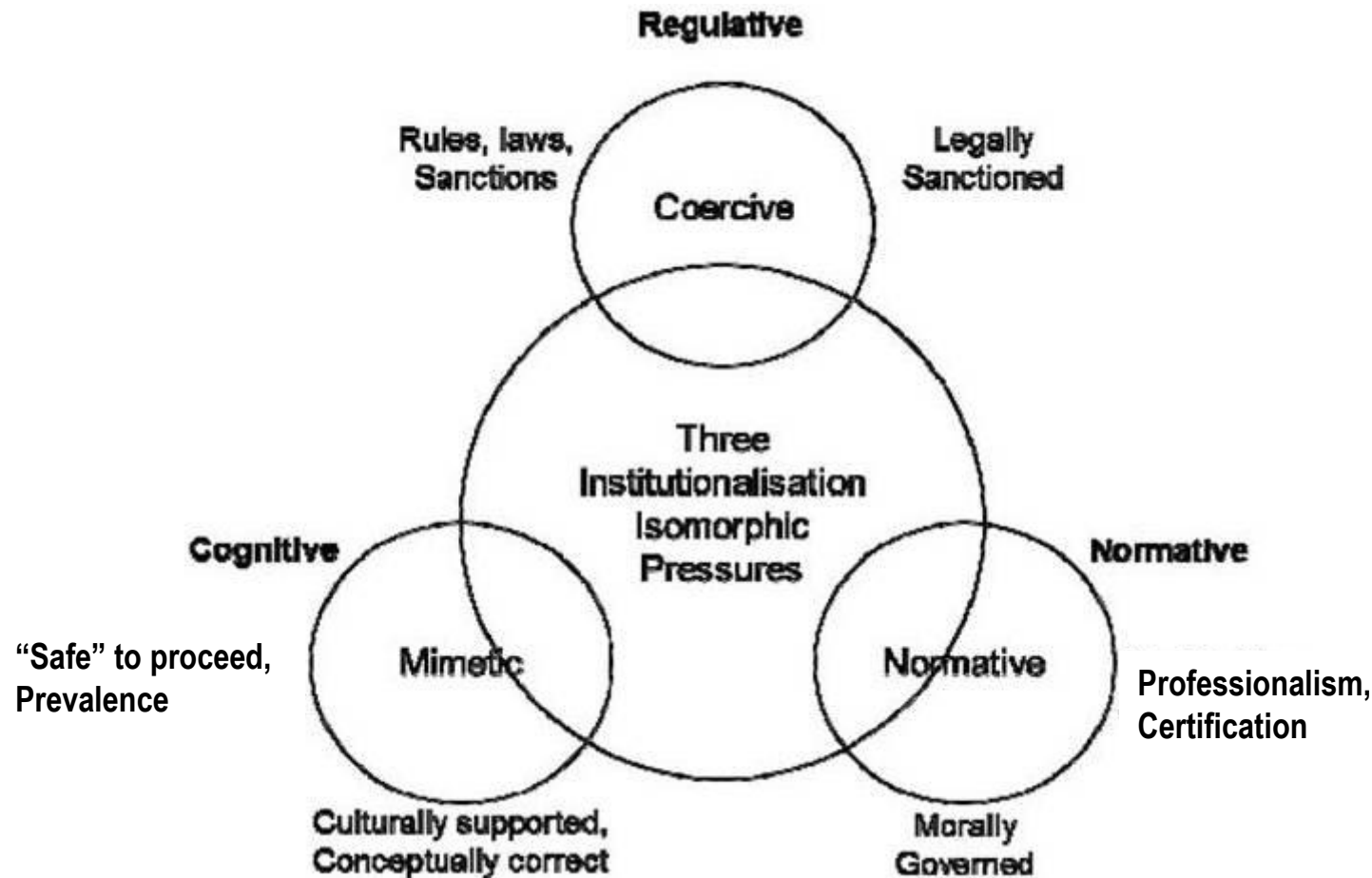
Figure 2.6 • Average annual global energy supply- and demand-side investment in the 66% 2°C Scenario



Note: T&D = transmission and distribution; EVs = electric vehicles; CCS = carbon capture and storage.

**Key message** • The level of supply-side investment remains broadly constant, but shifts away from fossil fuels. Demand-side investment in efficiency and low-carbon technologies ramps up to almost USD 3 trillion in the 2040s.

# INSTITUTIONAL PRESSURES TRUMP



# BREAKING INTO LAW

## #SANCTIONED

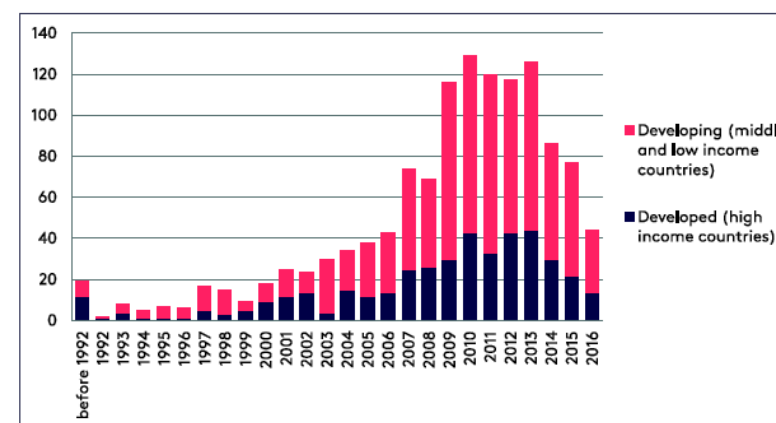
Table 1. Key focus areas for climate-related laws and policies

	Energy	Climate change / low-carbon transitions	General environment laws	Mainstreamed into development plans	Forestry	Green transport	Disaster risk reduction	Agriculture and food security	Other
No. of countries	145	125	92	71	47	18	15	12	38
% of countries	88.41	76.22	56.10	43.29	28.66	10.98	9.15	7.32	23.17
No. of laws	520	327	150	97	60	19			
% of laws	41.24	25.93	11.90	7.69	4.76	1.51			

Source: *Climate Change Laws of the World*

**Global Total:**  
1997: 60  
2017: 1200

Figure 4. Annual legislative action up to 2016 (number of new climate change laws per year)



Source: *Climate Change Laws of the World*

# GLOBAL PRESS CUTTINGS - PAST FEW DAYS

## #ACCEPTED-ON-THE-FRONT-PAGE

**IPE** INVESTMENT & PENSIONS EUROPE **30 May:**

TODAY'S TOP NEWS STORIES



Dutch investors split on climate change resolution at Shell AGM

BT mulls contingent asset deal as pension deficit swells

Diversity, ESG relatively low scheme governance priorities: survey

**FT**  
FINANCIAL  
TIMES

**18 May:**

The Big Read Renewable Energy + Add to myFT

## The Big Green Bang: how renewable energy became unstoppable

The shift to cleaner power is disrupting entire industries. Will the 21st century be the last one for fossil fuels?

**31 May:**  
**Pensions & Investments**



Exxon Mobil shareholders overwhelmingly pass climate change risk disclosure

**THE WALL STREET JOURNAL** **26 May:**



**THE STRAITSTIMES** **1 June:**

ExxonMobil vote shows Wall St diverging from Donald Trump on climate change

**theguardian**

**1 June:**



Paris climate deal / World urges Trump not to dump agreement

Big oil darlings / The Republicans who urged Trump to pull out

**Handelsblatt** **1 June:**

ELON MUSK UND DAS KLIMAABKOMMEN | NEU: vor 23 Min.

Tesla-Chef will Trump bei Ausstieg nicht länger beraten

Tesla-Chef Elon Musk will Donald Trump nicht länger beraten, wenn dieser den Ausstieg aus dem Pariser Klimaabkommen ankündigt. Deutsche Politiker zeigen sich indes gelassen: Paris sei auch ohne die USA nicht tot. [mehr...](#)



**De Telegraaf**  
**30 May:**

Tom Dumoulin viert thuiskomst met zijn hond

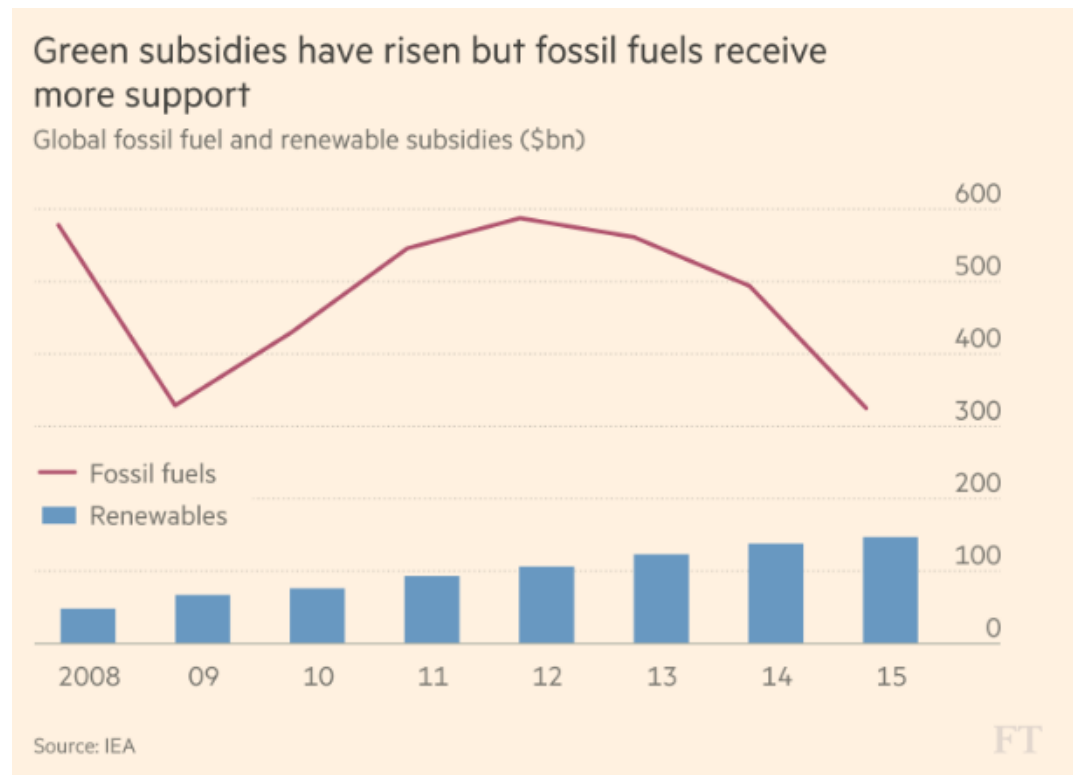
**FOTO** - Tom Dumoulin is weer thuis en daar geniet de winnaar van de Ronde van Italië met volle teugen van.



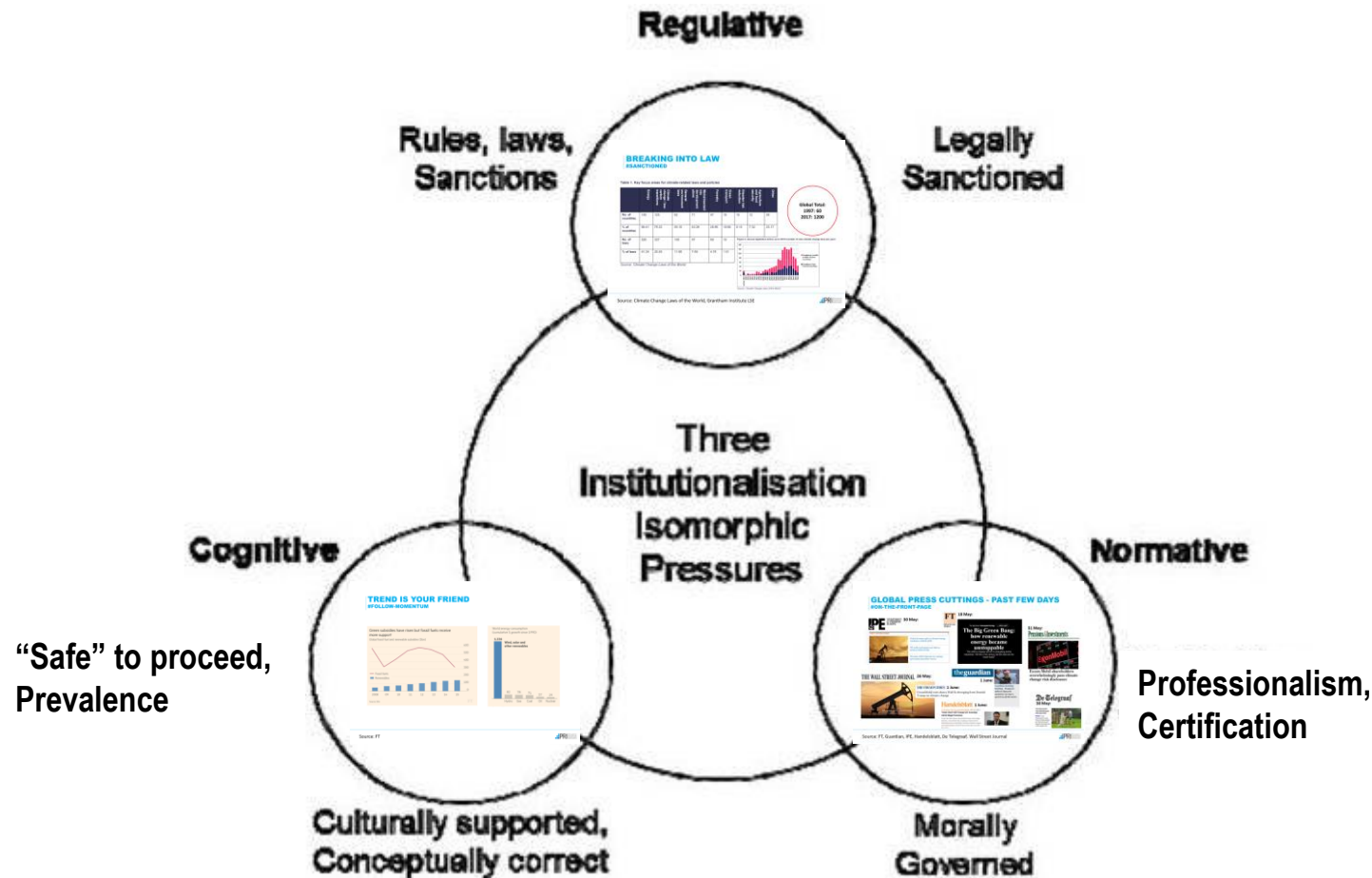


# TREND IS YOUR FRIEND

## #IN-THE-IN-CROWD

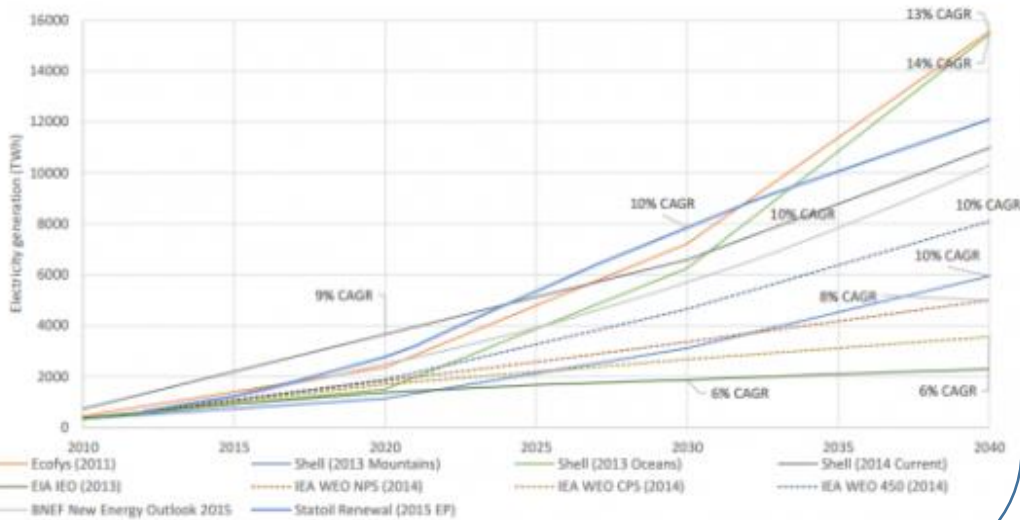


# INSTITUTIONAL PRESSURES TRUMP TRUMP

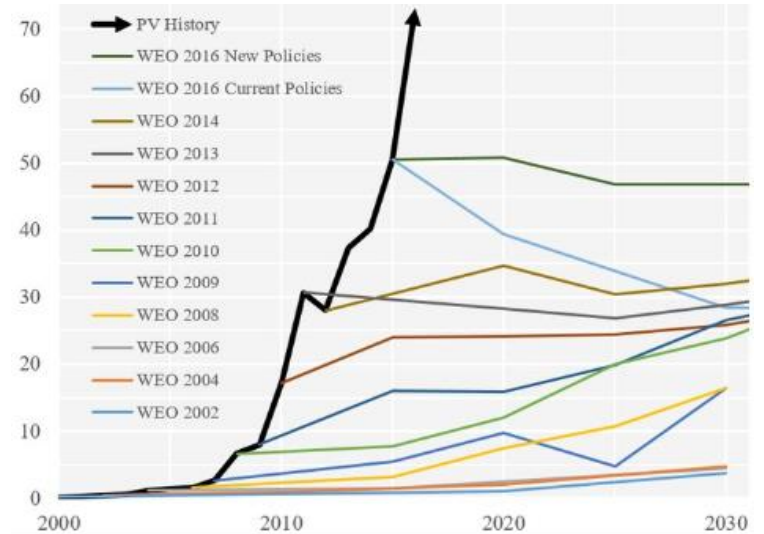


## AND THE SPEED MAY SURPRISE #CAN-YOU-BELIEVE-FORECASTS-CAN-FAIL?

## Comparing annual growth rate forecasts for wind and solar electricity generation from different sources



### Annual PV additions: historic data vs IEA WEO predictions



# LATE JUNE – STAY TUNED

## PRI OIL AND CARBON TRACKER OIL & GAS INDUSTRY RISK MAP PUBLISHED

**“ONLINE TOOL TO DISCOVER 70 GLOBAL COMPANIES,  
PROJECT BY PROJECT ENERGY TRANSITION RISKS”**



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# FSB TCFD READY?

Figure 5  
Supplemental Guidance for Financial and Non-Financial Sectors

Industries and Groups	Governance		Strategy			Risk Management			Metrics and Targets		
	A	B	A	B	C	A	B	C	A	B	C
<b>Financial</b>											
Banks			■			■					
Insurance Companies			■	■		■	■				
Asset Owners			■	■		■	■		■	■	
Asset Managers			■			■	■		■	■	
<b>Non-Financial</b>											
Energy	■		■			■			■	■	
Transportation			■	■					■	■	■
Materials and Buildings			■	■					■	■	■
Agriculture, Food, and Forest Products			■	■					■	■	■

Figure 3

## Recommendations and Supporting Recommended Disclosures

### Governance

Disclose the organization's governance around climate-related risks and opportunities.

### Strategy

Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.

### Risk Management

Disclose how the organization identifies, assesses, and manages climate-related risks.

### Metrics and Targets

Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities.

#### Recommended Disclosures

a) Describe the board's oversight of climate-related risks and opportunities.

b) Describe management's role in assessing and managing climate-related risks and opportunities.

#### Recommended Disclosures

a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.

b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.

c) Describe the potential impact of different scenarios, including a 2°C scenario, on the organization's businesses, strategy, and financial planning.

#### Recommended Disclosures

a) Describe the organization's processes for identifying and assessing climate-related risks.

b) Describe the organization's processes for managing climate-related risks.

c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.

#### Recommended Disclosures

a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.

b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.

c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.

# PORTFOLIO CARBON METRICS

	Pure risk	“Footprintings”		“Transitionals”	
	Scores	CO2 Footprint	Reserve Emissions	Green-Brown Share	Energy Transition
Description:	Modelling of qualitative & quantitative	Aggregation of current emissions, ‘financed’ emissions	Aggregation of ‘owned’ emissions	Solutions vs. aggravators	Energy mix alignment with transition scenario
Horizon:	History	History	Future	History / Future	Future
FSB TCFD fit:	Partly	Partly	Partly	Partly	Yes
Benchmark:	Yes	Yes	Yes	Yes	Yes
PROs:	Simplicity, Cross portfolio, Ease of allocation, Lowest cost.	Simplicity, Cross portfolio, Measure intensity, Low cost.	Sector specific, Locked-in emissions, Links to climate targets.	Links to climate targets, Action oriented.	Reference to global objectives, Link to climate targets.
CONs:	Blackbox, Process oriented, Subjective, Value on its own.	Goal setting, Scope, Accounting issues, Value on its own.	Limited to sectors	Complexity Hard to compare cross sectors,	Complexity

# Content

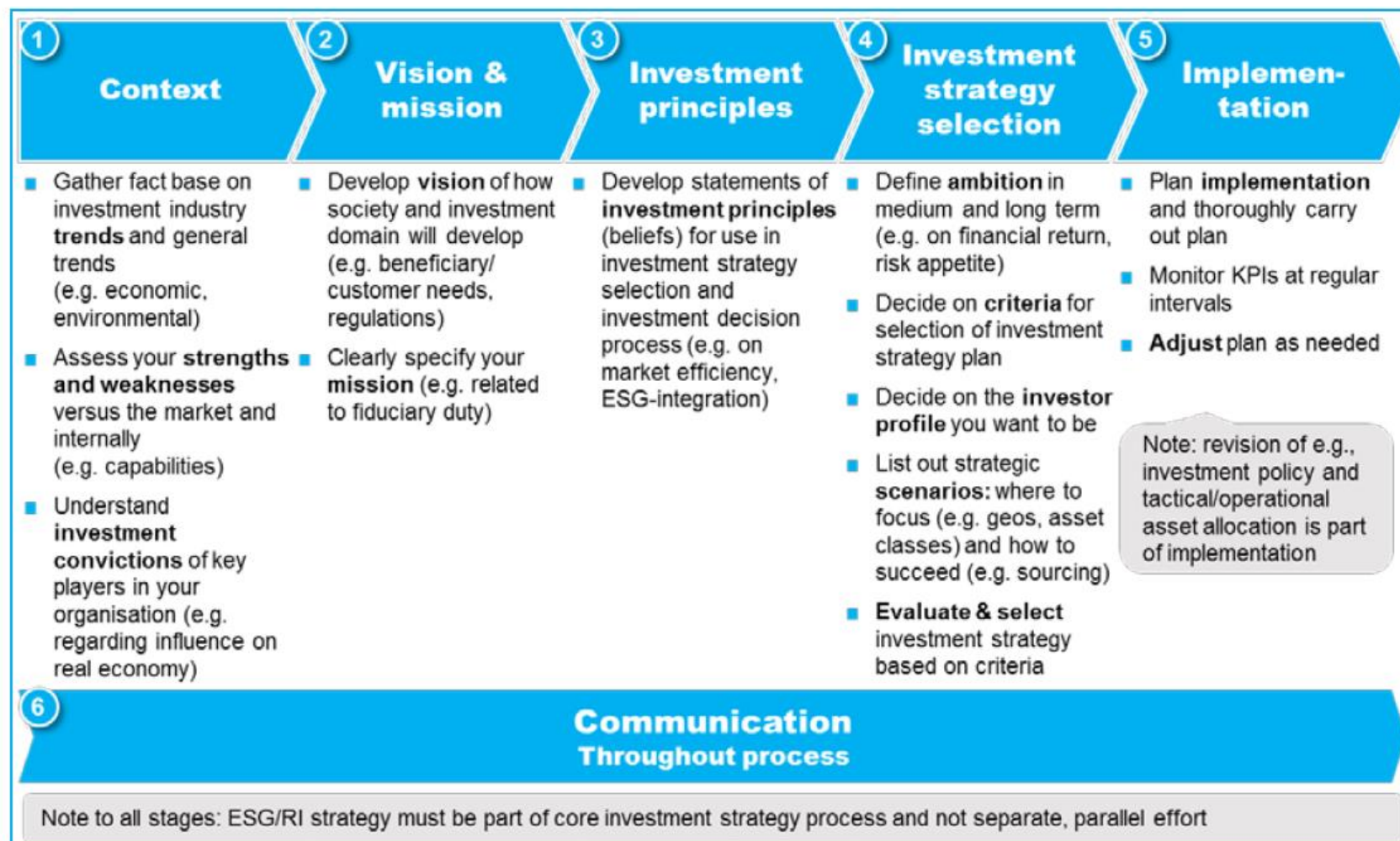
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# AN INVESTMENT STRATEGY PROCESS



## TWO DUTCH EXAMPLES

# DEVELOPING AN ASSET OWNER CLIMATE CHANGE STRATEGY


In 2015, Dutch healthcare pension fund PFZW, committed to increasing sustainable investments four-fold to 12% of assets and reducing the carbon footprint of its entire portfolio by 50% by 2020. Sustainable investments will include direct investments in green energy, clean technology, food security and water access. The footprint will be halved by comparing companies in each sector, picking the best performers and divesting from companies with the highest CO<sub>2</sub> emissions. The fund will also engage with companies to lower their CO<sub>2</sub> emissions.

ABP, the Dutch civil servants' pension fund, has in 2015 committed to a 25% reduction in greenhouse gas emission and doubling of investment in renewable energy and environmentally friendly technologies by 2020.

# Time to reflect...

## Observations?

### sustainability

/səsteɪnəˈbɪlɪti/ 

*noun*

noun: sustainability

the ability to be maintained at a certain rate or level.

"the sustainability of economic growth"

- avoidance of the depletion of natural resources in order to maintain an ecological balance.  
"the pursuit of global environmental sustainability"

Translate sustainability to Dutch 

1. duurzaamheid

Use over time for: sustainability





# PRI in Person

**25-27 September 2017**  
InterContinental Berlin

Where the global responsible investment community meets



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